

IN THE CLAIMS

Please amend the claims as follows:

Sub B1
a1
1. (AMENDED) A data controller comprising:
a transfer extend generator that generates [TEs] transfer
extend entries for a data transfer; and
at least one retrieval channel coupled to receive the
5 transfer control entries for programming the data transfer.

Sub C2
3. (AMENDED) A data controller, that is couplable to a
host and coupled to a storage medium, microprocessor, local storage
and a buffer memory, comprising a command queuing engine that
creates and executes threads of sequential commands while
5 minimizing interrupts associated to the commands.

A2 Sub B3
4. (AMENDED) A peripheral device that includes a data
controller, a microprocessor, a buffer memory, local memory and a
storage medium, and that is couplable to a host, wherein the data
controller [that] creates threads of sequential commands and [that]
5 generates interrupts at the beginning and end of the commands
relative to a data transfer.

Please add the following new claims:

5. (NEW) The data controller of claim 1, further comprising a data retrieval channel and a status retrieval channel.

6. (NEW) The data controller of claim 1, wherein the transfer extend generator stores the transfer extend entries and the at least one retrieval channel retrieves the transfer extend entries and programs a corresponding data transfer.

7. (NEW) The data controller of claim 1, wherein the at least one retrieval channel also programs a status context.

8. (NEW) The data controller of claim 5, wherein the data retrieval channel programs a data context and the status retrieval channel programs a status context.

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Sub B4 9. (NEW) The data controller of claim 8, wherein the status retrieval channel monitors a data transfer between a buffer memory and a storage medium.

10. (NEW) The data controller of claim 1, wherein the data controller is coupled to a first storage device that stores the transfer extend entries.

Sub B5 >

11. (NEW) The data controller of claim 1, wherein the at least one retrieval channel provides used read pointers for reuse.

12. (NEW) The data controller of claim 2, further comprising a command queueing engine.

13. (NEW) The data controller of claim 12, wherein the command queueing engine includes a transfer extend generator and a data retrieval channel.

14. (NEW) The data controller of claim 13, wherein the command queueing engine further includes a status retrieval channel.

15. (NEW) The data controller of claim 14, wherein each of the retrieval channels are coupled to receive transfer extend entries and to provide used read pointers.

16. (NEW) The data controller of claim 3, wherein the command queueing engine includes a transfer extend generator that generates transfer extend entries.